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OFFICE OF NAVAL RESEARCH

FINAL REPORT

for

Grant Number N00014-92-J-1557

NATO ADVANCED RESEARCH WORKSHOP

FRONTIERS OF OPTICAL PHENOMENA IN SEMICONDUCTOR STRUCTURE
OF REDUCED DIMENSION

July 27-31, 1992
Yountville, California

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Elias Burstein

Physics Department
University of Pennsylvania
Philadelphia, PA 19104

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FINAL REPORT

The NATO Advanced Research Workshop on "Frontiers of Optical Phenomena in Semiconductor Structures of Reduced Dimensions" provided a forum in which experimental and theoretical physicists discussed and evaluated recent developments in the optical research of the exciting new phenomena that occur in the electron systems of semiconductor nanostructures. The topics of principal interest to the participants included the integral and fractional quantum Hall effects, the non-linear optics of low dimensional electron systems, the optical responses associated with electrons in quantum wires and dots and the optical characterization of electron tunneling in ultra-small structures. We also had informative presentations on recent developments in the studies of optically active porous silicon and the optical properties of C₆₀ molecules. The papers presented at the Workshop are to appear in a Proceedings being published by Kluwer, Dordrecht, The Netherlands. Three copies of the Proceedings will be provided to ONR.

The Financial Report on the Funds provided by ONR via Grant N00014-92-J1557 to the University of Pennsylvania, which contains the names of the American participants who received support and the amounts provided, is attached.

The list of participants who attended the Workshop is given in the Annex (Appendix).

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NATO Advanced Research Workshop

Frontiers of Optical Phenomena in Semiconductor Structures of Reduced Dimensions

Financial Report on Funds provided by ONR through grant N00014-92-J-1557
to the University of Pennsylvania under the direction of Professor Eli Burstein

Partial Travel Support:

D. Awschalom: University of California	\$250.00
E. Burstein: University of Pennsylvania	\$250.00
D.S. Chemla: Lawrence Berkley Laboratory	\$350.00
B.I. Halperin: Harvard University	\$200.00
C. Kane: University of Pennsylvania	\$550.00
E.E. Mendez: T.J. Watson Research Center	\$250.00
R. Merlin: University of Michigan	\$591.00
A.V. Nunmikko: Brown University	\$50.00
A. Pinczuk: AT&T Bell Laboratories	\$300.00
E.H. Rezayi: California State University	\$250.00
J. Shah: AT&T Bell Laboratories	\$250.00
L.J. Sham: University of California	\$591.00
D.J. Steel: University of Michigan	\$591.00
J. Weiner: AT&T Bell Laboratories	\$300.00
	<u>\$4,773.00</u>

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ANNEX(A) DIRECTOR(S)Canada

Dr. D.J. Lockwood
Inst. for Microstructural Sciences
National Research Council of Canada
Ottawa, Ontario K1A 0R6
CANADA

USA

Dr. A. Pinczuk
AT&T Bell Laboratories
600 Mountain Avenue
Murray Hill, NJ 07974-0636
U.S.A

(B) KEY SPEAKERSBelgium

Dr. F.M. Peeters
Department of Physics
University of Antwerp (U.I.A.)
Universiteitsplein 1
B-2610 Antwerp
BELGIUM

Canada

Dr. P. Hawrylak
Inst. for Microstructural Sciences
National Research Council of Canada
Ottawa, Ontario K1A 0R6
CANADA

Professor C. Kallin
Department of Physics
McMaster University
1280 Main Street West
Hamilton, Ontario L8S 4M1
CANADA

France

Dr. B. Deveaud
C.N.E.T., LAB/OCM
F-22301 Lannion Cedex
FRANCE

Dr. C. Weisbuch
Thomson - CSF
Laboratoire Central de Recherches
Domaine de Corbeville
F-91404 Orsay Cedex
FRANCE

Germany

Professor Dr. G. Abstreiter
Walter Schottky Institut
Tech. Univ. München
Am Coulombwall
D-8046 Garching
GERMANY

Professor E.O. Göbel
Fachbereich Physik
Philipps-Universität Marburg
Renthof 5
D-3550 Marburg
GERMANY

Dr. D. Heitmann
Max-Planck-Inst. für Festkörperforschung
Heisenbergstrasse 1
D-7000 Stuttgart 80
GERMANY

Professor Dr. J.P. Kotthaus
Sektion Physik
Universität München
Geschwister-Scholl-Platz 1
D-8000 München 22
GERMANY

Dr. N. Pulsford
Max-Planck-Institut für Festkörperforschung
Heisenbergstrasse 1
D-7000 Stuttgart 80
GERMANY

Dr. M. Stutzmann
Max-Planck-Institut für Festkörperforschung
Heisenbergstrasse 1
D-7000 Stuttgart 80
GERMANY

Professor Dr. K. von Klitzing
Max-Planck-Institut für Festkörperforschung
Heisenbergstrasse 1
D-7000 Stuttgart 80
GERMANY

Israel

Dr. I. Bar-Joseph
 Institute of Physical Sciences
 Weizmann Institute of Science
 Rehovot 76100
 ISRAEL

Dr. D. Gershoni
 Department of Physics
 Technion-Israel
 Institute of Technology
 Technion City
 Haifa 32000 ISRAEL

Italy

Dr. S. Scandolo
 Scuola Normale Superiore
 Piazza dei Cavalieri
 I-56100 Pisa
 ITALY

The Netherlands

Dr. G.E.W. Bauer
 Department of Theoretical Physics
 Delft University of Technology
 Lorentzweg 1
 2628 CJ Delft
 THE NETHERLANDS

Russia

Professor E.I. Rashba
 L.D. Landau Institute for
 Theoretical Physics
 117940 Moscow, Russia
 USSR

Spain

Dr. J.M. Calleja
 Dpto. Fisica Aplicada C-IV
 Universidad Autonoma
 E-28049 Cantoblanco, Madrid
 SPAIN

Dr. C. Tejedor
 Dept. Fisica Materia Condensada
 Univ. Autonoma de Madrid
 E-28049, Cantoblanco, Madrid
 SPAIN

U.K.

Professor L. Eaves
Physics Department
University of Nottingham
Nottingham NG7 2RD
U. K.

Dr. A.S. Plaut
Department of Physics
Exeter University
Stocker Road
Exeter EX4 4QL
U.K.

Dr. J.F. Ryan
Clarendon Laboratory
Parks Road
Oxford OX1 3PU
U.K.

Professor M.S. Skolnick
Department of Physics
Sheffield University
Sheffield S3 7RH
U.K.

U.S.A.

Dr. D. Awschalom
Department of Physics
University of California
Santa Barbara, CA 93106
U.S.A.

Professor E. Burstein
Department of Physics
University of Pennsylvania
Philadelphia, PA 19104
U.S.A.

Dr. D.S. Chemla, Director
Materials Sciences Division, MS 66
Lawrence Berkeley Laboratory
1 Cyclotron Road
Berkeley, CA 94720
U.S.A.

Professor B.I. Halperin
Lyman Lab. of Physics
Harvard University
Cambridge, MA 02138
U.S.A.

Professor C.L. Kane
 Physics Department
 University of Pennsylvania
 Philadelphia, PA 19104-6396
 U.S.A.

Dr. E.E. Mendez
 IBM Research Division
 T.J. Watson Research Center
 P.O. Box 218
 Yorktown Heights, NY 10598
 U.S.A.

Professor A.V. Nurmikko
 Division of Engineering
 Brown University, Box M
 Providence, RI 02912
 U.S.A.

Professor E.H. Rezayi
 Physics & Astronomy Department
 California State University
 Los Angeles, CA 90032
 U.S.A.

Dr. J. Shah
 AT&T Bell Laboratories, Rm. 4D415
 Crawfords Corner Road
 Holmdel, NJ 07733-3030
 U.S.A.

Dr. L.J. Sham
 Department of Physics
 University of California, San Diego
 La Jolla, CA 92093-0319
 U.S.A.

Professor D.G. Steel
 Department of Physics
 Randall Laboratories
 University of Michigan
 Ann Arbor, MI 48109
 U.S.A.

(C) OTHER PARTICIPANTS

Germany

Dr. Rainer G. Ulbrich
 IV. Physikalisches Institut
 Universität Göttingen
 Bunsenstrasse 11-15
 D-3400 Göttingen
 GERMANY

U.S.A.

Professor R. Merlin
Physics Department
Randall Laboratories
University of Michigan
Ann Arbor, MI
USA 48109

Dr. Joseph Weiner
AT&T Bell Laboratories
600 Mountain Avenue
Murray Hill, NJ 07974-0636
U.S.A.